



Residential Construction Minimum Required Inspections

The permit which you have been issued gives authority for work to commence. The stamped, approved plans, returned with this permit, shall be retained at the job site and be available for inspectors on request. It shall be the applicant's responsibility to perform all work in accordance with the Virginia Uniform Statewide Building Code, and within the scope of what was authorized by the plans submitted and approved. Changes to these plans must be approved by this office. Please post your permit placard in a prominent location.

Inspections at various stages of work are required by this office, under provisions of the Virginia Uniform Statewide Building Code. The required inspections for buildings are listed below. James City County, Division of Building Safety and Permits, operates an automated 24-hour a day, 7 days a week web-based inspection request system <https://epermit.jamecitycountyva.gov> to schedule inspections. You will need a Customer ID and Password number assigned when a permit is issued or obtained from our office by calling 757-253-6620. Instructions are available on our Building Safety and Permits web page under "NEW – ePermit website." Omission of any of this information may result in the inspection not being conducted. Requested inspections are assigned daily at 6:30 a.m. Any inspection requested after that time will be done the following business day. If work is not complete and open for inspection, it may be subject to disapproval and require reinspection. When work is disapproved by an inspector, a \$50.00 reinspection fee must be paid.

Separate permits are required for building, mechanical, electrical, gas, gas fireplace, and residential sprinkler work. No requested inspection is performed unless a valid permit exists for that work. Work performed without a permit, when permit is required, is a violation of the law! If you have a question whether a permit is required, or if work is within the scope of any permit issued, call the Division of Building Safety and Permits.

If you feel that it is necessary to speak directly to an inspector, their office hours are 7:00–8:00 a.m. and 3:00–3:30 p.m. only. Please do not call them to request an inspection.

BUILDING INSPECTIONS REQUIRED: (ALL APPROVED PLANS MUST BE ON SITE FOR INSPECTIONS NOTED WITH ★)

A. ★FOOTING INSPECTION – To be made after basement or footing trenches are excavated and forms, where applicable, are erected. All reinforcement steel, when necessary, must be in place and anchored. This inspection must be made prior to pouring concrete. If slab on grade (monolithic pour) construction this inspection includes the foundation inspection. The inspector will also check for the required erosion control measures as shown on the approved site plan. If these items (e.g., silt fence, construction entrance, etc.) are not properly installed, this inspection may be disapproved. Structures with reinforcing steel that is ½" or larger and 20' or longer must have a grounding electrode system installed per National Electrical Code 250.50 (3). This will be inspected at the same time as the footing inspection.

B. ★FOUNDATION

1. Masonry Foundation Wall Inspection

The foundation block must be completed to the level of the finish grade, and be continuous over any steps or grade changes. Piers must be complete to the level of finish grade and any brick or other veneer must also be in place. All bonding or other lateral support of intersection walls must be complete and visible. All form boards or step boards must be removed and the foundation trench ready for backfilling. The top of the footings must be clean and clearly visible. Inspectors will not wait more than several minutes until the footing is made visible if they arrive and find it has been covered.

2. Floor Joists Inspection

To be made after load-bearing walls to the first floor sill height have been erected, beams and floor-joists have been installed, and grading within the perimeter walls has been completed. Sub-flooring shall not be installed before this inspection has been approved. In basements, the first floor system (box) shall have all approved (on plans) supports (posts, columns) for beams and girders in place and secured.

NOTE: If you are in a flood zone, an FEMA flood elevation certificate must be submitted to our office prior to this inspection. The “Building Under Construction” box on line C1 of the Elevation Certificate must be checked.

3. Water/Damp-Proofing Inspection

Basements must be inspected for water-proofing method, drains, gravel, and filter cloth before being backfilled.

4. Concrete Slab Inspection

To be made prior to pouring a concrete slab. All reinforcing steel, vapor barriers, fill material if required, perimeter insulation, etc. must be in place and ready to inspect before scheduling this inspection. A compaction certification is required where fill material exceeds 24 inches in depth. Concrete material waiting to be installed on site will not be an excuse to allow incomplete slabs to be inspected.

C. FIREPLACE INSPECTION – Where there is to be a fireplace(s) installed in a building, this inspection must take place while combustible clearances can be inspected. This must be before the interior is insulated and sheetrocked, but may be after the fireplace is finished. This includes all types of fireplaces; masonry, prefab, and ventless. **NOTE:** A separate mechanical permit is required for gas fireplace appliances.

D. *FRAMING INSPECTION – To be made after the roof, all framing firestopping, blocking and bracing is in place, and the sub-flooring has been installed. Do not install insulation before the framing inspection is approved. The building should be “weathered in” including windows, doors, and roof shingles for this inspection. The inspector will also check the condition of the required erosion control measures. If these items are not in good condition, this inspection may be disapproved.

NOTE: Our current web-based inspection request system (<https://epermit.jamecitycountyva.gov>) does not automatically schedule trade inspections with framing requests. It is helpful, but not mandatory, to schedule trade inspections all on the same day if possible for new construction. We will not conduct a framing inspection unless all trades have passed or are at a minimum scheduled at the same time as the framing inspection for any residential and most commercial projects. Partial framing inspections may be done on a case-by-case basis on some commercial projects. Framing inspections scheduled without the proper trade permits and inspections will automatically be cancelled.

E. AIR BARRIER INSPECTION – An air barrier visual inspection will be required on all new homes before concealing the air barrier unless a blower door test will be performed by a certified individual. The choice for the blower door testing option must be made at the time a permit is applied for. In either case, an insulation inspection will be also be required. This may be done at the same time as the air barrier inspection or at a later date. It shall be the permit holder’s responsibility to know what option was chosen and to call for the proper inspections. A certified test result for blower door testing must be supplied prior to a final building inspection. Failure to pass a blower door test when that option was selected will require air sealing measures be taken until a passing test result can be achieved.

The air barrier inspection will include: An approved air barrier material or suitable film or solid material applied per manufacturer's installation instructions at all required locations and all penetrations of exterior walls sealed. Installed windows and doors are preferable at this time but not mandatory unless an insulation inspection is also requested at the same time.

- F. ***INSULATION INSPECTION** – To be made when all required insulation and appropriate air sealing elements have been installed. In the event that the contractor intends to use blown insulation in the ceilings, that portion of this inspection may be delayed until and during the final inspection.

Exception: Insulation between slabs and exterior walls will be inspected during the foundation inspection.

- G. ***FINAL INSPECTION** – To be made after the building has been completed and ready for occupancy. This inspection will not be made until all required electrical, plumbing, gas, fireplace, and mechanical final inspections have been made and the work approved. A Certificate of Use and Occupancy is issued only after completion of this inspection. The structure may not be used or occupied in whole or part until issuance of a Certificate of Occupancy. The disturbed area must be stabilized or the required erosion control measures must be in good condition.

NOTE: If you are in a flood zone, an FEMA flood elevation certificate must be submitted to our office prior to this inspection. The "Finished Construction" box on line C1 of the Elevation Certificate must be checked.

PLUMBING INSPECTIONS REQUIRED:

- A. **WATER AND SEWER** – To be made after all water and sewer lines are installed from the water and sewer mains (or wells and septic tanks) to the structure. Trench must be open and all lines accessible to the inspector. This includes Geothermal Piping System horizontal trenches.
- B. **ROUGH-IN INSPECTION** – Under-slab inspection to be made prior to pouring concrete (under-slab). Rough-in inspection after all interior piping (water and sewer) has been installed and tested, and prior to concealment. It will be helpful to schedule trade rough-ins at the same time either ahead of or on the same day that the general contractor requests the framing inspection. Our system will not automatically schedule trade inspections as in the past. Trades must be passed ahead of or at a minimum scheduled with framing inspections.
- C. **FINAL INSPECTION** – To be made after all plumbing work has been done and all appliances and fixtures involving water and/or sewer connections have been installed. Grinder pumps need to be operational.

ELECTRICAL INSPECTION:

- A. **ROUGH-IN INSPECTION** – Under-slab inspection required prior to pouring concrete. Rough-in inspection to be made after all interior wiring and electrical equipment has been installed, but prior to covering or concealment and prior to installation of any insulation. It will be helpful to schedule trade rough-ins at the same time either ahead of or on the same day that the general contractor requests the framing inspection. Our system will not automatically schedule trade inspections as in the past. Trades must be passed ahead of or at a minimum scheduled with framing inspections. All electrical contractors will have the option to have the electrical meter release inspection for one and two-family residences performed on the same day as the electrical rough-in inspection. The following requirements must be in place at this release/rough-in electrical inspection:
1. The service wiring and equipment, including the meter socket enclosure, shall be installed and the service wiring terminated.
 2. The grounding electrode system shall be installed and terminated.

3. At least one receptacle outlet on a ground fault protected circuit shall be installed and the circuit wiring terminated.
4. Service equipment covers shall be installed.
5. The building roof covering shall be installed
6. Temporary electrical service equipment shall be suitable for wet locations unless the interior is dry and protected from the weather.

If all of the above-listed items are not completed at the time of the electrical rough-in inspection, the rough-in may be approved but the meter will not be released until the electrical trim-out has been completed and inspected.

- B. **FINAL INSPECTION** – To be made after electrical work is complete and power is turned on. **JUST BECAUSE POWER IS ON, IT DOES NOT MEAN YOU CAN OCCUPY OR USE THE STRUCTURE. YOU MUST HAVE A C.O. FIRST!**

MECHANICAL INSPECTIONS REQUIRED:

- A. **ROUGH-IN INSPECTION** – Under-slab inspection to be made prior to pouring concrete. Rough-in inspection to be made after the installation of all equipment, duct work, gas lines, fuel storage tanks, etc., and prior to covering or concealment. It will be helpful to schedule trade rough-ins at the same time either ahead of or on the same day that the general contractor requests the framing inspection. Our system will not automatically schedule trade inspections as in the past. Trades must be passed ahead of or at a minimum scheduled with framing inspections.

At the mechanical rough-in inspection of a new home either a visual inspection of the duct sealing method will be required or the permit holder will have elected on a separate form at the time a permit is applied for the intent to perform a duct blaster test. The results of this test must be supplied in writing to the building department prior to the final mechanical inspection.

- B. **FINAL INSPECTION** – To be made after all heating, ventilating, and air conditioning installations have been completed and tested.
- C. **GAS LINES** – Rough-in inspection required after installation of all lines and after pressure test is complete (but before concealment of any lines or fittings). It will be helpful to schedule trade rough-ins at the same time either ahead of or on the same day that the general contractor requests the framing inspection. Our system will not automatically schedule trade inspections as in the past. Trades must be passed ahead of or at a minimum scheduled with framing inspections. Final inspection required after hookup of all gas appliances. Gas service will not be released to the utility company for connection until these inspections are approved. If service is interrupted, new pressure tests and inspections may be required prior to release to the utility company.

In addition to these required inspections, the USBC states that structures may be inspected at any time during construction. Occasionally, inspectors will visit jobs unannounced and when not requested. It is the permit holders responsibility to furnish a ladder if one is needed for a requested inspection.

Nonresidential structures may have other inspection obligations. Fire separation walls, fire walls, and party walls in apartments, condominiums, town houses, and commercial structures may require separate inspections. Please consult the Building Safety and Permits Office if your permit(s) involve(s) such fire-rated walls.

Drawings required to be submitted may vary depending on the complexity of the work and requirements of the Building